

July-Dec. 1997



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FOUNDER PRESIDENT: *The late DR. HUGO FLECKER*
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OBJECTS: The furtherance of the study of the various branches of Natural History and the preservation of our heritage of indigenous flora and fauna.

MEETINGS: Second Tuesday of each month at 8pm at the Cairns Education Centre, Greenslopes Street, Edgehill, Cairns.

FIELD DAYS: Sunday before meeting.

CLUB OFFICERS:

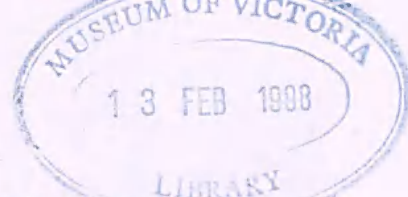
PRESIDENT
HON. SECRETARY
HON. TREASURER
EDITOR

— MR. TED BILL
— MRS. DAWN MAGARRY
— MRS. DERNA ELSDON
— MS. ELEANOR DUIGNAN

SUBSCRIPTIONS: (Due September 30th)

CITY AND SUBURBAN MEMBERS.....\$15.00
COUNTRY MEMBERS & PENSIONERS...\$10.00
FAMILY MEMBERSHIP.....\$20.00





FROM THE EDITOR

To produce a bi-annual journal for any organisation takes a lot of time, effort and perseverance on the part of any editor. The best results of any published periodical relies on the quality and quantity of the articles. We have the means to produce an outstanding booklet which was and still is the club's objective from its formation in 1932. In review, the progress and standard of the Clubs Journal in recording the Natural History of the area leans heavily on its members to gather or compose publishable material. We must not lose sight of the clubs aims in 'the furtherance of study of the various branches of Natural History and the preservation of our heritage of indigenous flora and fauna'.

However, the main educational and environmental preservation body is now the Department of Environment (a combination of The Wet Tropics Management and National Parks and Wildlife Scheme) which put in place strategic environmental plans based upon scientific, academic and political input. In dealing with issues which are contrary to the community and the conservation minded we turn to CAFNEC, the Cairns and Far North Environmental Centre which speaks out on our behalf.

In my opinion the initial role of The North Queensland Naturalist Club has changed quite dramatically from its being the North's main conservation planning and advisory body to virtually a 'Natural History Recording Centre'. There are now many wildlife carer and educational groups which specialize in public awareness and the protection and conservation of the flora and fauna of our TROPICAL NORTH QUEENSLAND. These groups to name a few are:-

Tableland Frog Club, The Far North Queensland Wildlife Protection Group, Far North Queensland Wildlife Rescue, Tree Kangaroo and Mammal Group - Malanda, Bird Observers Club of Australia - Cairns, Birds Australia - Cairns, Cape York Herpetological Society Inc., Kuranda Environment Association, Kuranda Landcare Group, Marine Education Society of Australia (MESA), and the Mareeba Wetland Foundation.

In addition there are many other landcare organisations, Tree Planting Groups, Frog Monitoring Groups, Societies and Management Planning Associations all focused on protecting what we have. I believe that what the Far North Queensland Naturalist's Club has achieved is being the recording centre and hub for all of the above organisations.

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FROG RECOVERY TEAM REPORT
SEPTEMBER 1997 MEETING
 BY: Deborah Pergolotti

The Northern Queensland Threatened Frog Recovery Team met in Cairns on September 18th 1997. Andrew Dennis chaired the meeting as Keith McDonald was overseas. Several important issues were discussed at this meeting which are detailed below.

Firstly, Richard Retallick (JCU Townsville) provided a presentation of his studies at Eungella National Park with two endangered frogs: The Eungella Tinker Frog (*Taudactylus liemi*) and the Eungella Torrent Frog (*T. eungellensis*). Richard's work was comprehensive and even included data on the lifespan of these two rare frogs (surprisingly short - only 4 years on average).

Richard's report was followed by Ross Alford's (JCU Townsville) presentation of his testing barometers in frog development referred to as 'fluctuating asymmetry'. This is based on the concept that when frogs are under stress - and therefore more susceptible to illness - they show this stress in minor fluctuations in their limb lengths. Limbs on the left and right sides are carefully measured and a calculation is applied to the result. If the deviation is over a specific threshold, the frog is determined to be asymmetrical and under stress. This information may be an early sign that a population of frogs is about to decline. It is intended that all frog monitoring will include taking these measurements as part of the standard field work.

It was also announced that the Smithsonian Institute and NASA in the USA will be hosting a conference in early December on climate. What's exciting is that this event is specifically for researchers around the world who are trying to find the answers of the declining frog problem. Ross Alford will be representing Australia at this event.

Also discussed at the TFRT meeting was the June 1997 press release from Griffith University concerning the finding of two of the missing frogs: The Northern Tinker Frog (*T. rheophilus*) and the Sharp Snouted Day Frog (*T. acutirostris*). One of these finds was on Mt. Lewis. The Recovery Team suggested Deborah Pergolitti to organise some excursions to Mt. Lewis to search for the missing frogs and this was agreed with the first trip targeted for early November. Other trips would be arranged for the other two sites involved as soon as volunteers become available. *** (Please note Deborah has been successful in her locating *Taudactylus rheophilus* at Mt. Lewis).

Andrew Dennis gave a report on the frog monitoring he is doing for the Department of Environment and Deborah Pergolotti gave her report on the monitoring being done by the dedicated

volunteers of the Cape York Herpetological Society Inc. Deborah's report also gave an update on the lobbying she has been doing at State Government level to try to obtain funding for the declining frogs. Thus far, the Borbidge Government is not budging on the issue, but the Labour Opposition has taken a strong interest.

Rick Speare gave an update to his research on the pathogen responsible for the current deaths of common frogs and rare frogs in SE Queensland. A fungus has been identified called *Dermosporidium* and this same fungus has also turned up in dead frogs in Panama. How many other countries might be suffering from this latest assault on our amphibians?

Rick and Deborah are also working on a simplified version of the protocol to be used for collecting sick and dead frogs for turning over to JCU or the Geelong Laboratory for testing. As soon as this protocol is ready, Deborah will be distributing the information to community groups.

Environment Australia's Endangered Species Unit is hosting a National Threatened Frog Workshop on November 12th and 13th in Canberra. This workshop will be reviewing what is currently known about the declining frog problem, what need to be done and where the community might assist. Representatives from all Frog Recovery Teams will participate as well as selected 'movers and shakers' in the frog world. The Northern Queensland Recovery Team will be represented by Keith McDonald (Department of Environment, Atherton), Ross Alford and Rick Speare (JCU Townsville) and - thanks to the sponsorship of World Wide Fund for Nature - the Community Group's representative, Deborah Pergolotti. (Deborah's report from the Workshop will be published next issue).

All in all- a most interesting meeting with lots of activity on various fronts concerning frogs. There is a lot more to be done, and yet, in the meantime, the frogs are still dying...

For further information or to pass on further information or ask questions of the Frog Recovery Team, please contact:

Deborah Pergolotti
P.O. Box 2731
CAIRNS. Q. 4870
or PH. 0418152199



Tasmanian froglet *Ranidella tasmaniensis*
Fungi *Gymnopilus pampeanus*



FIELD TRIP/CAMP AT CAPE KIMBERLEY

By: Dawn Magarry and Sybil Kimmins

On the Cairns Show weekend, July 18-20, 1997, club members left with considerable enthusiasm for their first-time camp at Cape Kimberley, 126km north of Cairns. Even the crossing of the Daintree River by the cable operated ferry was an interesting experience and the fee quite reasonable. The camp was held at the small Club Daintree Resort which is fortunately sheltered from the south easterly winds blowing in from the beach.

The beach itself from the Cape to the mouth of the Daintree River was smothered with tiny balls of sand. These are formed and deposited by sand babbler crabs (*Scopimera inflata*) in artistic arrangement which assists in its food gathering.

Sightings of a cassowary and an echidna were recorded which proved a most rewarding experience for new club members.

The observation walks on Saturday revealed different types of forest and habitat apart from rainforest. Numerous small Deplanchea tetraphylla plants grew on the rise overlooking Snapper Island as well as acacias and casuarinas.

In slightly swampy land near the sea, dillenia alata grew in weird shapes with unusually red branches dripping to the ground, taking root and rising as new trees. An old log causeway led through mangroves to Cape Kimberley Beach.

Many palms including Licuala ramsayi were prolific in the rainforest surrounding the Resort. Some of the trees and other plants recorded were:-

Cebera floribunda
Fagraea camagei
Connarus concho carpus
Commersonia bartramia
Alyxia spicata
Stachytarpheta jamaicensis
Clerodendrum floribundum
Randia fitzalanii
Acanthus ilicifolius
Glochidion
Harpullia frutescens
Achmena hemilampra
Syzyguim cormiflora
Elaeocarpus augustifolius
Elaeocarpus bancroftii
Davidsonia pruiens
Macaranga tanarius
Sloanea langii
Calophyllum inophyllum
Pittosporum rubiginosum
Lycopodium cernum

Cassowary plum
Pink jitta
Shell vine
Brown currajong
Climbing chain fruit
Blue snake weed
Lollybrush

Holly leaf mangrove
Harveyanum
Dwarf harpullia
Broad leaf lilly pilly
Bumpy satinash
Blue quandong
Kuranda quandong
Davidsons plum

White carabeen
Alexandrian laurel
Hairy red pittosporum
Coral fern

Lygodium flexuosum
 Schizaea digitata
 Hornsredtia scottiana scottiana
 Rhaphidophora pinnata
 Freycinetia
 Calamus australis
 Choianthus axillarus
 Breynia cernua
 Licuala ramsayi
 Linospadix
 Archontophoenix alexandrae

Fern
 Fern ally
 Native cardamon

Wait-a-while
 Pimply olive

Fan palm

Alexandra palm

At Newell Beach the following were observed:-

Scaevola sericea
 Colubrina asistica
 Passiflora foetida
 Morinda citrifolia
 Casuarina equisetifolia
 Terminalia catappa
 Capparis lucida
 Pittosporum rubiginosum
 Dodonea polyandra
 Smilax australis

Sea lettuce

Cheese fruit
 Beach oak
 Beach almond

Greenbriar

Quite a comprehensive bird list was recorded for the area with a total of 66 species as per the list below:-

Cassowary
 Black Kite
 Whistling Kite
 Osprey
 White Breasted Sea Eagle
 Gull Billed Tern
 Whimbrel
 Eastern Curlew
 Red Capped Dotterel
 Double Banded Dotterel
 Bush Stone Curlew
 Brown Pigeon
 Peaceful Dove
 Bar Shouldered Dove
 Scaly Breasted Lorikeet
 Fig Parrot
 Sulphur Crested Cockatoo
 Boobook Owl
 White Rumped Swiftlets
 Laughing Kookaburra
 Forest Kingfisher
 Sacred Kingfisher
 Rainbow Bee-eater
 Little Shrike Thrush
 Pale Yellow Robin
 Grey Whistler
 Northern Fantail

Leaden Flycatcher
 Spectacled Monarch
 Pied Monarch
 Shining Flycatcher
 Large Billed Warbler
 Brown Warbler
 Fairy Warbler
 Helmeted Friarbird
 Yellow Spotted Honeyeater
 Graceful Honeyeater
 Dusky Honeyeater
 Macleays Honeyeater
 Bridled Honeyeater
 Sunbird
 Mistletoe Bird
 Silvereye
 Varied Triller
 Black Butcherbird
 Yellow Oriole
 Fig Bird
 Spangled Drongo
 Spotted Catbird
 Kestrel
 White Breasted Woodswallow
 Yellow Honeyeater
 Magpie Lark
 Welcome Swallow

Chestnut Breasted Mannikin
 Brown Goshawk
 Crested Tern
 Silver Gull
 Pelican
 Intermediate Egret
 Striated Heron
 White Ibis
 Royal Spoonbill
 Straw Necked Ibis
 Great Egret
 Spotted Turtledove

MOTHS

Nyctemera baulus
 Dysphania fenestrata

Echidna

BUTTERFLIES

Ulysses
 Common Eggfly
 Evening Brown
 Union Jack
 Orange Bush Brown
 Common Jezebel
 Red Lacewing
 Bright Oak Blue
 Orange Dart
 Common Crow
 Blue Tiger
 Common Grass Yellow
 Cedar Bush Brown
 Common Albatross

THE NEST

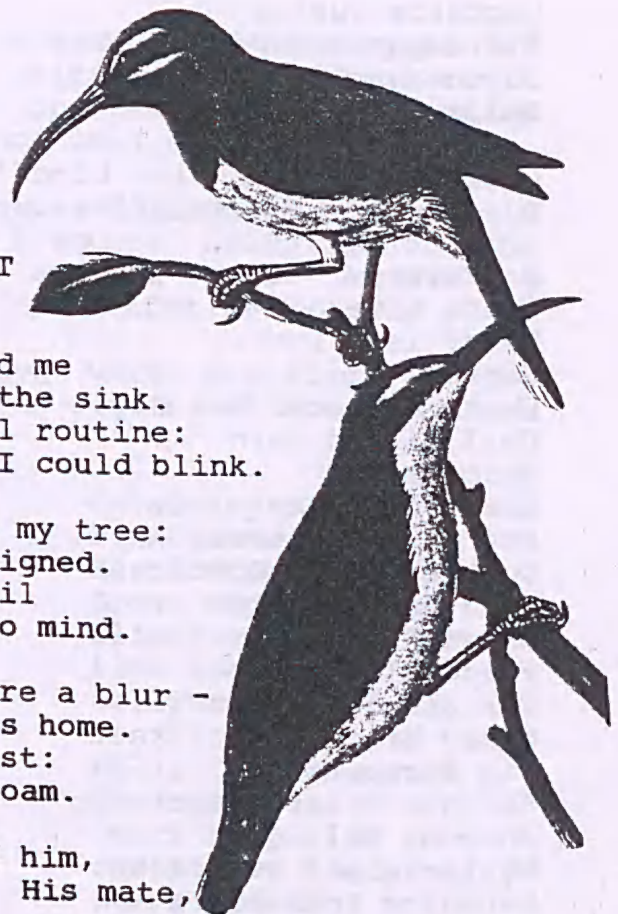
A blur of brown and yellow startled me
 While performing homely duties at the sink.
 My mind was lost, transcending dull routine:
 The thing flashed by, faster than I could blink.

A brown cuckoo swayed, pendant in my tree:
 A structure small but cleverly designed.
 Cobweb stitches held a delicate tail
 That brought old-fashioned kites to mind.

And then the blur returned - no more a blur -
 Bent on inspection of last season's home.
 A tiny bird resplendent in blue vest:
 The wanderer no longer wished to roam.

As procreation's urge took hold of him,
 'Come here!' he called excitedly. His mate,
 Canary yellow on her underside,
 Flew in to ascertain their old nest's state.

Like tiny helicopters hovering there,
 They prodded, touched, the soft interior
 Then, satisfied, it seemed, they flew away.
 I wait for their return to taht small door.



By: Sybil Kimmins

HISTORY OF THE NORTH QUEENSLAND NATURALISTS CLUB

AN EARLY SOCIETY

AN EXTRACT FROM THE NORTH QUEENSLAND NATURALIST-VOL 1 NO.1
(OCTOBER 1932)

A Cairns Field Naturalists' Club was formed at a meeting in the School of Arts on March 13th 1905, and the following officers were appointed:-

Chairman;	E.M. Cornwall
Vice Chairman;	J.G. Fearnaley
Hon. Secretary-Treasurer;	E. Allen
Committee;	Hyland, D. Dean, F. Ingram, J. Anderson, J. Brewer, F. Barrett

Subscription fees were fixed at 5/- for adults and 2/6 for Juniors. Several excursions were held and apart from being successful were of value to science. Through investigations by the first Chairmen, a fruit pigeon, until then unknown to ornithologists, was discovered in the Cairns district. On the first excursion on April 9th, some rare butterflies were obtained and a dragonfly which was also new to science. Mr J.G. Fearnaley placed the S.S. 'Vigilant' at the club's disposal for a marine excursion to Green Island on October 22nd. That was a very instructive outing as was one held at Edgehill in conjunction with St. Johns' Mineralogy Class. Two papers were read to meetings - 'The Rhopalocera of Cairns and District' by J. Brewer and 'An introduction to Entomology' by Mr E. Allen who used lantern slides. Mr Cornwall left for Mackay during the year but before his departure he was presented with a pair of rare 'Attraus' moths by the Club. A credit balance of £5/7/4 existed at the end of the year.

For the second year the officials were:-

Chairman;	W.H.J. Mayers
Vice Chairman;	D. Dean
Hon. Secretary-Treasurer;	E. Allen
Committee;	P. Hocking, F. Ingram, J. Griffiths J. Anderson, E. Moody, A. Atkinson

The club did not live through this year although some of the members are still in the district.

ORIGIN OF THE CLUB

By: Dr H. Flecker

The idea of a Naturalists Club occurred during a meeting of the Cairns Tableland Publicity Association in June 1932. A discussion arose concerning the trustee-ship of Lake Barrine, whether local trustees or trustees appointed by the Government were the more fit to preserve all the natural features of such an extremely interesting locality. It was felt that the most capable body to advise upon the best method of preservation,

would be a Club, specially interested in Natural History. As no such Club existed it became a matter of urgency to those who had brought the matter forward to have one established. Accordingly, at the next monthly meeting of the Publicity Association, held on July 19th, it was moved that the Mayor of Cairns (Alderman W. Collins) be requested to convene a meeting for the purpose of establishing a Field Naturalist's Club. It was believed that such an organisation would gratify its own members and would be of permanent benefit to the community. The Club would not only be useful in drawing attention to the many natural features of the district, but could act as guides to other investigators. Besides, the members would be trained to distinguish natural phenomena and to classify them. Accordingly, the Mayor convened a meeting which was held in the Cairns Council Chambers on August 19th. Those present were constituted a committee to form such a Club. A well attended meeting held at the Harbour Board Office on August 29th drew up rules, fixed subscriptions and appointed officials. The rules were formally ratified at the next meeting held on September 12th.

VICE REGAL MEMBER

While in Cairns recently His Excellency, the Governor of Queensland (Sir Leslie Orme-Wilson) accepted an invitation to become an Honorary Member of the North Queensland Naturalists Club.

**** Note ****

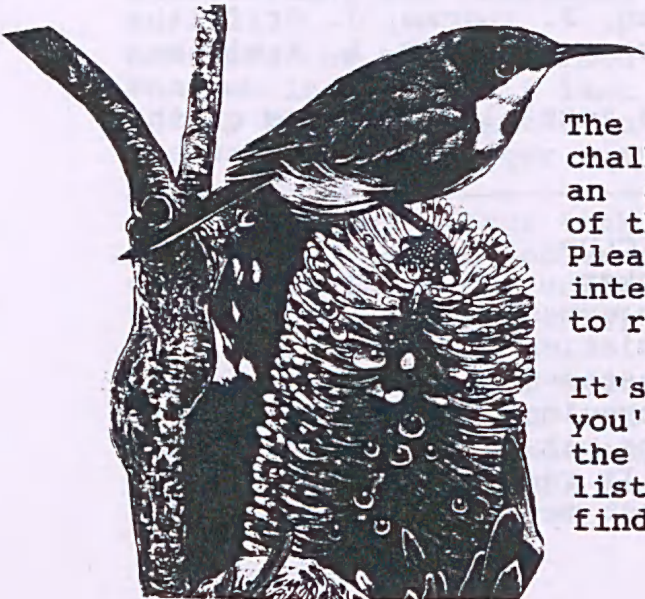
The above extract from the first 'Naturalist Journal' does not list the current members. We do know that Dr H Flecker was appointed first Chairman and that V. Kennedy the first Hon. Editor. Other names mentioned in Vol.1 No.1. are Mr. Edmund Jarvis, Mr Ike Askew, and Mr T.P.Hoey B.A..

PLEASE SHARE YOUR FAUNA

The MARREBA HERITAGE MUSEUM now has a chalk board outside. This is to be used as an up to date flora and fauna listing of the Mareeba and surrounding areas. Please help the rest of us spot some interesting nature too, by dropping in to record your sightings.

It's fun to tell others when and where you've seen uncommon species - and at the same time read what others have listed. Please call in to add your findings to the nature list.

THE MAREEBA HERITAGE MUSEUM



FROM THE PAST

An Extract From 'The Proceedings of the Royal Society of
Queensland 1892 - 1894 Volume 10'

ON THE AUSTRALIAN CASSOWARY (*Casuarus australis*)
By: A. MESTON

The first cassowary described in Australia was shot by an aboriginal who accompanied Kennedy's expedition from Rockingham Bay to Cape York in 1846. This native was known as 'Jacky Jacky' to the white men, and as 'Galmarra' or the 'composer of songs' to his own tribe on Patrick's Plains, Hunter River, New South Wales. In the history of Australian exploration there is no name more honourably entitled to undying remembrance. But for that brave and faithful savage not a soul would have survived that fatal expedition.

On the 17th August, 1857, the first cassowary brought to Sydney was landed there by Captain Devlin of the cutter 'Oberon'. This bird came from the island of New Britain, where the natives called it 'Moorook'. The Australian Emu, originally was named by Latham *Casuarus Nove Hollandiae*, or the 'New Holland Cassowary'. (Salvadori describes nine species of cassowary in New Guinea and the neighbouring islands).

In the Journal of Carron, one of the survivors of Kennedy's party, we find the following entry for November 14th, 1848:- 'This morning 'Jacky' went to examine a scrub through which we wanted to pass, and while out he shot a fine cassowary. It was very dark and heavy, not so long in the legs as the emu, and had a larger body, shorter neck, and a large red, stiff, horny comb on top of the head. Mr Wall skinned it, but from the many difficulties with which we had to contend, the skin spoiled before it could be preserved.' This was near Whymouth Bay, seven days before the party divided. The first description of this cassowary appeared in the 'Illustrated Sydney Herald' on June 3rd, 1854. In 1866, Walter Scott of the Herbert River, got a bunch of cassowary feathers in the blacks' camp and sent it home to Dr. P.L. Sclater, who exhibited it to the Zoological Society. AT the meeting of the Society, on June 11th, 1868, Sclater exhibited a complete skin received from Water Scott, and taken from a bird shot by Henry Stone at Herbert Vale Station. The first skeleton was also sent home by Scott, and given by Sclater to the Royal College of Surgeons in 1871. The first Australian cassowary in England was sent in the ship 'Ramsay' care of Captain Cave, by the Marquis of Normanby in October, 1874. This bird was obtained at Cardwell by Lord Henry Phipps from Mr and Mrs Conn, who were afterwards murdered by the blacks. On March 6th, 1871, W.J. Scott again wrote from The Valley of Lagoons, telling the Zoological Society that a planter named Haig, on the Lower Herbert, had caught a full grown specimen, and was desirous of presenting it to the Society. This is the first

recorded capture of a Queensland cassowary. Dr E. P. Ramsay, Curator of the Queensland Museum, obtained two young ones while at Cardwell in March, 1874, and the second one received in England was sent home by him to the Zoological Society and delivered on May 28th, 1875.

The Australian cassowary is found only in North Queensland on the east coast from Cardwell Range to Cape York. A correspondent informed me that one was seen within 12 miles of Charters Towers, but this required confirmation. The Cardwell blacks say the cassowary has rambled farther south since the advent of white man, and a solitary bird may have even wandered along the coast range, and through the scrubs of the Burdekin to within 12 miles of Charters Towers, impelled by the same restless spirit that sent a Port Essington buffalo to the plains of the Flinders.

The cassowary is an inhabitant of the dense tropical jungle that clothes from the case to the summit the coast ranges of the Cape York Peninsula. This jungle also covers the level country between the mountains and the sandbeach from Cardwell to Cooktown. It crosses the range and extends, in places, for some distance on the western slopes. The cassowary follows that jungle to its outer edges, east and west, but I possess no record of any being seen on the rivers running to the gulf of Carpentaria. The favourite habitat of the bird includes the Johnstone, Russell, Mulgrave, Mossman, Daintree and Bloomfield Rivers. North of Cooktown it inhabits belts of jungle on the east coast from Princess Charlotte Bay to Newcastle Bay.

A full-grown cassowary stands from five to six feet in height and weighs from 150 to 200lbs. One shot by my son during the Bellenden-Kerr expedition, in 1889, and weighed in presence of the Colonial Botanist, was 184lbs. This bird is now in the Queensland Museum. The second bird in the museum was shot by me on the Barron River, and weighed 170lbs. One shot by John Nairne on Freshwater Creek, near Cairns, weighed 250lbs, and I have seen specimens that must have stood six feet six inches and weighed nearly 300lbs.

So large a bird requires an enormous quantity of food, and a full-grown one must eat at least a hundred pounds of fruit daily. Wild fruits of many kinds grow in great abundance in the scrubs inhabited by the cassowary. Every bird has a favourite feeding ground, and comes year after year to some particular tree or trees, generally the oil nut (Alueries Moluccana), pencil cedar (Lucuma galactoxylon), Omphaleas, Cryptocaryas, or Davidsonian Plum (D. pruiens). The cassowary is also fond of the Burdekin plum (Pleiogynium solandri), which grows alike on good soil and the open forest sandy belts near the seabeach. About twenty different fruits are eaten by the cassowaries on the Russell, Mulgrave, Barron, and Daintree Rivers. In captivity they are very impartial to their diet, displaying uncontrolled omnivorous propensities, and

swallowing with equal satisfaction boiled sweet potatoes, raw liver, fresh eggs, dead rats, and grass marbles. I never knew anything seriously disorganize the epigastric region of a cassowary except a tin of red lead. The digesting apparatus, which yields excellent pepsine, is a large digestive sac, not the ordinary gizzard of a bird. Connected with this sac is a single large intestinal canal like that of a tiger, and the digesting process is effected with astonishing rapidity. All food is imperfectly assimilated, the harder fruits occasionally showing very trifling changes. A young cassowary will retain his food not more than one hour. Though chiefly frugivorous, the wild cassowary also eats beetles, rats, mice, young birds, tender bulbous roots, and small fish stranded in floods or left in evaporated pools. If man ever acquired the appetite and digestion of the cassowary, the whole human race will soon be exterminated by famine.

Even the best stuffed specimen gives but a poor representation of this magnificent bird. The taxidermist has, so far, failed to reproduce the beautiful scarlet and orange colours, and marvellous opalescent shades of light and dark blue on the head and neck. Absent also are the proud imperious carriage, the measured stately stride, the sonorous ventriloquial voice, and the deep dusk fire of the dark lustrous malign eyes. The two long wattles on the throat are found on both male and female. Some are destitute of this appendage, like one of those in our museum. On the top of the head is a ridge-shaped helmet about four or five inches in height, one of Nature's wonderful adaptations to the necessities of environment. Without that helmet a cassowary would have to live in open forest, for the lawyer vine of the jungle would tear his head and neck to pieces the first time he ran from an enemy. When running in the dense scrub he extends his head and neck in front in a horizontal position, and the vines glide from his helmet on to his shoulder and then harmlessly along the plumage of the back. When scared by a sudden surprise, the bird will rush through the undergrowth with a noise like a scrub bullock, tearing vines and breaking bushes, but if he has sighted you quietly he will vanish through the densest mass of tangled vegetation in a manner apparently miraculous. He is a much heavier and far more powerful bird than an emu, and is dangerous to approach when wounded or 'bailed up'. One of the three toe-nails reaches a length of over four inches, and I have seen a cassowary tear the side out of a dog and disembowel the animal with one kick. When two males fight they spar like boxers and kick like lightening in three directions - sideways, straight in front, and out behind. I have seen two large birds strike each other simultaneously, the recoil throwing both on their backs.

At night they camp between the flanges at the root of a tree, or stand, or crouch on the breast, in a patch of lawyer vines or undergrowth. If approached by man with a bull's-eye lantern they will not attempt to run and can be lassoed or knocked down.

A full-grown cassowary has no fear of a dingo or a tame dog. A tame dog's first interview with a cassowary, especially a conceited dog, is a comical spectacle. The dog suddenly sniffs the unusual trail, makes a wild rush forward, catches sight of a six feet cassowary quietly picking up pencil cedar plums, gives a sort of canine 'Hooray! here's something grand!' and advances to the charge with all the supercilious arrogance which contemptuously underestimates the resources of the adversary. The next scene shows an astonished and terror-stricken dog, with no visible tail, flying for his life in a cloud of dead leaves, pursued by cassowary, with his plumes all standing erect and a voice that sounds - to a dog - like a fog horn blown by Lucifer on the shores of Acheron. When the cassowary is out of sight the dog sneaks back to his master's heels and meekly enquires, in the plain language of looks, if he saw 'that red-headed earthquake?'

The hen cassowary lays from two to six eggs on the bare ground, usually in some secluded part of the scrub, in a thicket of lawyers or stinging tree, and she and the male divide the responsibility of incubation, sitting on the eggs for about five weeks. After hatching, the young birds are placed entirely under the control of the male bird, and I have never seen the female in charge of her family.

In three or four days the young birds are strong enough to run at a considerable pace, and when danger is announced they hide under logs, dive into holes at the roots of trees, or squat in a heap of leaves, and lie perfectly still until the old bird calls them together. Up to two years of age the plumage is grey, and thenceforth it darkens to a bright black colour at five years. When out on the ranges, on the north branch of the Mulgrave River, in 1885, I saw a very large and beautiful white cassowary, evidently an albino. He had no wattles, nor any of the usual gorgeous colours on the neck. This noble bird walked leisurely across the dry bed of a watercourse, and vanished in the dense brush. Maturity is attained in seven years.

The voice of the young bird is a plaintive whistle; that of the grown bird varies from a deep boom to a harsh hiss. He adopts this tone when chasing a dog.

Cassowaries are very fond of bathing, and I have seen them frequently plunging and fluttering their plumes, and throwing somersaults in shallow pools. Occasionally they are attacked and killed by crocodiles. They are frequently caught and drowned in the valleys by the sudden floods in the creeks and rivers. Many were drowned on the Mulgrave River in the flood of 1890. Several bodies of large cassowaries were found after the waters subsided.

On the Johnstone, Russell, Mulgrave, and Barron Rivers, the cassowary is known to the blacks as 'Boondarra', 'Keendadja', 'Bomba', 'Boomboom', and 'Goombijan'. The bird is eaten in

all stages, from the egg to the full-grown specimen. In the tribe of 'Bolambi' on the Mulgrave River, I found one class had the cassowary as a totem, and of course was prohibited from eating the egg or the flesh. The class was named 'Keendadja' after the bird.

The New Guinea natives make daggers and spear butt-ends from the leg bones, and use the plumage for decorative purposes. The North Queensland natives rarely use the plumage, and make no use of the bones.

The cassowary accumulates an immense amount of oil, especially from November to March, and I have obtained six or seven quarts from one bird. The skin is covered by fat and very difficult to preserve. The oil rather increases than prevents rust on articles of steel. It is extremely effective for stiff joints or contracted muscles.

Professor Owen regarded the cassowary as the nearest living representative of the ancient Palapteryx or Dinornis, a genus of extinct-gigantic birds which included the Moa of New Zealand. The present living representatives of the once mighty order of Ratitae, are the African ostrich, the South American rhea, the Australian emu, the New Zealand apteryx, and the cassowary.

Two species of Dromaius (D. patricius and D. gracilipes), contemporary with the Diptrodon, have been found on the Darling Downs, and named by Mr De Vis of the Queensland Museum, but no fossil cassowary remains have been recognised in Australia.

A copy of the above original article was recently handed to me by Mike Trennery of the Department of Environment. The reason behind my reproducing it here is because it is only now (November 1997) a little over 100 years that a management plan has finally been put in place to protect our almost extinct cassowaries. The management plan itself will be not effective for a least two years as each individual cassowary and its habitat is to be recorded. This in itself a massive undertaking. Once the preliminaries are in place Councils, Developers, and Town Planners will be given options as to the futuristic protection of the cassowary and its habitat with priority given to those at immediate risk.

Community Wildlife Carer groups and Societies such as ours are requested to assist with suggestions and ideas to add to the Management Plan's compilation.

EDITOR

GARDEN OBSERVATIONS - SACRED IBIS
BY: Dawn Keith

The Australian White Ibis or Sacred Ibis (*Threskiornis molucca*) frequent my garden - one in particular having caught my attention. I have an ordinary sized birdbath which was discovered by the ibis. Firstly, it had a drink by putting its head sideways into the shallow bowl of the birdbath where upon it could drink from this position.

Perhaps by observing the smaller birds flitting in and out of the water - it gained the idea of getting right in there! Standing in the bird bath, stooping down to get some water, it then preened itself for a good five minutes or more.

The next day the ibis again visited for its drink, splash, groom and preen. Unfortunately, eventhough the flock still feed in the yard I haven't seen any attend the 'grooming session' at the birdbath.

WILDLIFE, WATER & WATCHING
BY: Angela Ward

I have often watched with amusement the antics of various birds as they perform their daily ablutions in the birdbaths in our garden. The Brown Honeyeater's entry and exit of the water is so quick, that if it wasn't for the tiny splash, one wouldn't even be sure that he'd had a dip at all, whereas the Magpie-Lark, Helmeted Friarbird and Common Myna are the biggest exhibitionists of them all. No hesitation or trepidation affects these three show-offs, they literally throw themselves into the bath, always remaining the longest and vacating the 'tub' thoroughly saturated, leaving little or no water for the others waiting patiently in the queue. From their comical displays, it appears that this daily ritual is a welcome pleasure for them and not just another task to be completed at the end of each day.

However, the most endearing show thus far must surely belong to our latest visitors, the Double-eyed Fig Parrots (MacLeay's form). After a short drink, these birds will turn and face outwards on the edge of the bath. Having checked his surroundings once or twice, the parrot will slide himself slowly backwards into the water until his tail is just submerged, pauses, and then pulls himself back up onto the rim of the bowl. A test of the water temperature or a safety check of the depth? One can only hazard a guess. He will then proceed to walk backwards and lower himself into the water again once or twice before getting on with his splashing and bathing.

This is not an isolated incident or a peculiarity to one single bird. I have observed this method of behaviour being performed by as many as three Fig Parrots on varying days. **

MAGARRY'S 7 to 7 - FOR THE BIRDS!

BY: Dawn Magarry

Our garden is like the proverbial supermarket at the moment (October). Especially attractive in FRUIT & VEG. are the Omalanthes novo-quineensis (Bleeding Heart) berries to crowds of chattering Metallic Starlings. The Brown Cuckoo Doves are more sedate, moving slowly over the branches, then sitting quietly with full crops, doing a little preening from LAUNDRY AIDS until they can fit in some more berries. There are occasional visits to THE DELI from Fig Birds, Varied Trillers and Pied Imperial Pigeons, while an Emerald Dove picks up the fallen fruit of early shoppers. The next item on the shopping list is that of Carallia bracheata (Corkwood) picked over by fussy Fig Birds, Pied Imperial Pigeons, Yellow Orioles and Metallic Starlings. Next to this tree in SPICES is a Myristica insipida (Native Nutmeg), its bright red fruit a bargain for Pigeons and Starlings.

The Glichidion ferdinandi (Cheese Tree) berries remained hidden in the DAIRY PRODUCTS until the sharp eyes of a pair of Starlings found them. While the female busily ate the bright red seeds her mate serenaded her, his iridescent throat pulsing with a VARIETY of MUSIC so different from the frenzied chatter of the big flocks. She was obviously not impressed by all the HOME IMPROVEMENTS and ignored him.

In the LIVE MEAT DEPARTMENT (insects, etc.) buyers are Fairy Gerygones, Black Butcherbird, Magpie Larks, Black Faced Monarch, Willie Wagtail, Spangled Drongo, Little Shrike Thrush, Gould's Bronze Cuckoo and Red Necked Crake which also took a bath in BATHROOM DISPLAYS.

The BEVERAGE SECTION had a line up of Graceful, Yellow Spotted and Dusky Honeyeaters, Helmeted Friarbirds, Sunbirds and Rainbow Lorikeets in the Calliandra tree blossoms. Fig parrots zipped along the aisles so quickly I couldn't spot where they landed but did discover them leaf bathing in the Golden Penda from GARDENING. They too like the Glochidion berries in FRUIT & VEG.

All this as Peaceful Doves foraged for seed as FLOOR CLEANSERS.

LIFE MEMBERSHIP AWARDS - 1997

Ted Bills, current and long standing Club President since 1988 has been conferred with life membership for his dedication, contribution, effort and support of The North Queensland Naturalists Club. It is people like Ted who form the backbone of such organisations as this, and all members sincerely congratulate him.

EDITOR

KNOW YOUR REPTILE AROUND CAIRNS

By Permission from M. Anthony

KEELBACK (*Tropidonophis mairii*) Mair's Keeled SnakeOther Common Names

Freshwater Snake, Water Snake, Grass Snake, Pepper and Salt Snake, (McPhee, 1979); Mair's Keelback (Storr, Smith and Johnstone, 1986); Common Keelback (Worrell, 1963).

History

The first description of the Keelback appeared in 1841 in Gray's 'Journals of Two Expeditions of Discovery in North-west and Western Australia, During the Years 1837, '38 and '39, under the Authority of Her Majesty's Government' as *Tropidonotus mairii*, with the type data presumed lost. In 1842 Gray describes the same species as *Tropidonotus australis* from two specimens from Port Essington, N.T., now lodged in the British Museum of Natural History. Dumeril, Bibron and Dumeril described a specimen in 1854 from Australia, lodged at the Museum of Natural History in Paris, as *Tropidonotus semicinctus*. Macleay described this species on three separate occasions; firstly in 1877 as *Katophis pumbea* from PNG (since recognised as the PNG subspecies, *Tropidonophis mairii plumbea* (Cogger, 1995); secondly as *Tropidonophis angusticeps* from Ripple Creek, Herbert River, Qld., in 1884; and again in 1885 as *Triopidonophis ater* from 'vicinity of Herbert River', Queensland (all type specimens lodged in the Australian Museum). The Keelback appears in Krefft's Snakes of Australia (1869) as *Tropidonotus picturatus*. It was included in the world wide genus of water snakes, *Natrix*, for some time (Kinghorn, 1929; Worrell, 1963). Since then, it has appeared in the genus *Amphiesma* (a group of related snakes of Indo-Malaysia and New Guinea) (Cogger, 1975) and *Styporhynchus* (separating the Australian species from the South-east Asian genus *Amphiesma*) (Cogger et al., 1983), and has since been transferred to the South-east Asian genus *Tropidonophis* (Cogger, 1992).

The Keelback is solid-toothed (no venom-injecting apparatus) and a therefore harmless snake of the family Colubridae. It grows to approximately 0.7 metres (Wilson and Knowles, 1988) with a maximum of 1 metre (Cogger, 1992) or 1.2 metres (4 feet) (Worrell, 1963).

While not an aggressive snake, the Keelback may stand its ground when cornered, hissing and inflating its body with air and raising its head in a strike pose, though it will rarely bite, even when captured. Upon capture it will thrash itself about, exuding an unpleasant scent. If grabbed by the tail the animal will thrash itself about to the extent of dismemberment of the tail, an unusual trait in snakes. Wilson and Knowles (1988) state that the tail is readily disgarded, suggesting that this snake has the ability to drop its tail in the manner of lizards.

This species is easily recognised due to its keeled scales, but in parts of its range (eastern Australia) it is sympatric (shares the same range) as the dangerous Rough-scaled Snake (Tropidechis carinatus) - an elapid which also has keeled scales and looks similar. The two species are readily separated by the number of mid-body scale rows - 15 (rarely 17) in Tropidonophis mairii and 23 in Tropidechis carinatus, and the anal and subcaudal scales which are divided in Tropidonophis mairii and single in Tropidechis carinatus. Tropidonophis mairii also possesses a loreal scale which is absent in Tropidechis carinatus.

The coloration of the Keelback is enormously variable in North Queensland. Specimens from suburban Cairns vary from grey to shades of yellow, green and brown - two specimens found together were brown (subadult) and greenish (adult). A bright yellow specimen was found at Kuranda and are frequently found in creeks between Daintree and Bloomfield Rivers (G. Werren pers. comm.). Reddish brown specimens have been found at Blencoe Falls and Mt. Garnet, while a black specimen with a pale head was observed near Cooktown. Krefft (1869) believed that the Keelback's colouration varied with season.

History

The Keelback is recorded from the Clarence River district of NSW (Krefft, 1869), extending through misic habitat up the east coast and ranges to Cape York, across the Top End of the NT and the Kimberley, south to Manning Creek and Kununurra (Storr, et al., 1986). As mentioned above, a subspecies, T. m. plumnea, occurs in south-central PNG.

Habits

This species is found in close proximity to water throughout its range, often in large numbers and may be active at night or day, but most commonly around dusk. Large aggregations of this species have been observed around Cairns in open stormwater drains (J. Harbrow, L. Telford, pers. comm.) and in the Brisbane area following flooding (Covacevich, 1974). The large numbers of this species occurring in some areas may be related to its ability to feed upon young Cane Toads (Bufo marinus) without ill effect, although Krefft (1869) reports an observation of a colleague, Mr George Masters, who observed 'large numbers' of this species 'at lagoons or waterholes where he was encamped' obviously before the introduction of the Cane Toad. It is commonly found around houses in Cairns, especially those backing onto creeks and swamps; on one occasion an individual was observed curled up underwater at the edge of a creek (T. Hawkes pers. comm.) It is known to shelter under surface debris, tussock overhangs, in ground and mud holes or animal burrows (Ehmann, 1995). McPhee (1979) reports a specimen unearthed from an ants nest. The Keelback is commonly observed on roads at night, especially during wet weather.

The Keelback's basic prey is frogs (Cogger, 1992), but tadpoles, lizards (especially skinks - Ehmann, 1955) and freshwater fish (McPhee, 1979) are also consumed. Worrell (1963) states that frogs are consumed hindquarters first. A road-killed specimen near Mareeba was found with a Rocket Frog (Litoria nasuta) in its mouth (pers. obs.). Cogger and Lindner, (1974) observed numerous Keelbacks preying upon Ornate Burrowing Frogs (Limnodynastes ornatus) in shallow flowing water at the end of a swamp in the NT.

Reproduction

The Keelback is oviparous (egg-laying) producing five to fifteen (average eight), hatching after 12 to 15 weeks from February to April (Wilson and Knowles, 1988). Gow (1989) specifies a maximum clutch size of 17. The young, when hatched are approximately 13 to 16cm long (McPhee, 1979). Shine (1971) has found gravid Keelbacks year-round in Northern Australia with the exception of the driest time of year (October-November) but has only seen intense nesting activity in May and June, at the end of the wet season. Males are also believed to be smaller than females. Wilson and Knowles (1988) state that males engage in combat.

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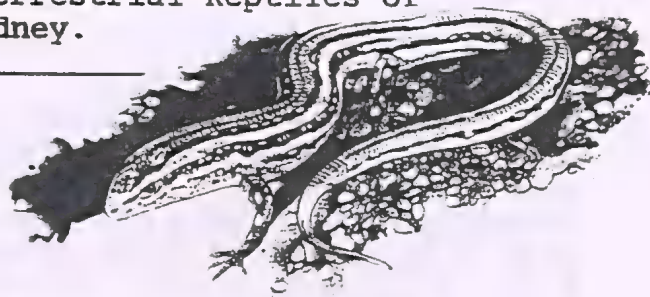
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Labillardier's skink *Ctenotus labillardieri*

MEETINGS AND FIELD TRIPS FOR 1998

<u>JANUARY</u>	24 - 26	CAMP AT LINGA LONGA FARMSTAY TUMOULIN RD., RAVENSHOE
<u>FEBRUARY</u>	4	COMMITTEE MEETING
	8	OUTING - WONGABEL BOTANIC WALK
	10	GENERAL MEETING
<u>MARCH</u>	4	COMMITTEE MEETING
	8	OUTING - MAREEBA WETLANDS
	10	GENERAL MEETING
<u>APRIL</u>	8	COMMITTEE MEETING
	10 - 13	ANNUAL CAMP - GEORGETOWN
	14	GENERAL MEETING
<u>MAY</u>	2 - 4	CAMP - DIMBULAH CARAVAN PARK
	6	COMMITTEE MEETING
	10	OUTING - OAK FOREST, KURANDA
	12	GENERAL MEETING
<u>JUNE</u>	3	COMMITTEE MEETING
	6 - 8	CAMP AND DAY OUTING TO GENAZZANO CENTRE - TOP OF THE GILLIES H'WAY
	9	GENERAL MEETING

FOR THOSE WHO REQUIRE TRANSPORT AND/OR VISITORS THE MEETING PLACE IS THE CAIRNS CITY LIBRARY, LAKE STREET TO LEAVE AT 7.30am SHARP.

In support of the Mareeba Wetland Foundation members were asked to carry out continued surveys of Pendanus Lagoon while Noeleen Grose (MWF Environmental Officer) took annual leave. The following survey lists the birds of Pendanus and surrounding area. Due to heavy rain the survey was hard work, but a lot can be done with the aid of a spotting scope on the back of a 4WD. However the perimeter was wholly traversed through the mud, slush and water.

BIRD SURVEY CARRIED OUT PENDANUS LAGOON (WETLAND NO.5)

27TH DECEMBER, 1997

By: E. Duignan and C. Perkins

WEATHER - HEAVILY OVERCAST - RAINY

6.30AM TO 10.30AM

SPECIES	NUMBER (+=H)
Australian Pelican	9
Darter	10
Little pied Cormorant	18
Little Black Cormorant	52
Great Crested Grebe	11
Little Grebe	2
Black Swan	2
Wandering Whistle Duck	24
Burdekin Duck	4
Pacific Black Duck	6
Hardhead	85
(Note: Large numbers o/head 200+)	
Australian Wood Duck	19
Eurasian Coot	85
White-faced Heron	3
Great Egret	1
Little Egret	4
Intermediate Egret	3
Royal Spoonbill	15
Masked Lapwing	20+
Black Fronted Dotteril	2
Black Winged (Pied) Stilt	6
<hr/> Other Species Noted Around Lagoon were:-	
Forest Kingfisher	2
Little Fryer Bird	10+
Yellow Honeyeater	2+
Pale Headed Rosella	10
Red-winged Parrot	2
White-winged triller	1
Little (white-bellied) cuckoo Shrike	2
Brush Cuckoo	1
Little Bronze Cuckoo	1
Chanel Billed Cuckoo	3
Common Koel	2+
Laughing Kookaburra	2+

Blue-winged Kookaburra	1+
Rufous Whistler	1
Leaden Flycatcher	1
Peaceful Dove	5
White Throated Honeyeater	1+
Lemon Bellied Flycatcher	3+
SPECIES OF INTEREST SEEN OUTSIDE SURVEY AREA:-	

Nankeen Night Heron	1
Bustard	1
Azure Kingfisher	1
Cicada Bird	3+
Brown Falcon	1

CLANCY'S LAGOON (WETLAND NO.6):-

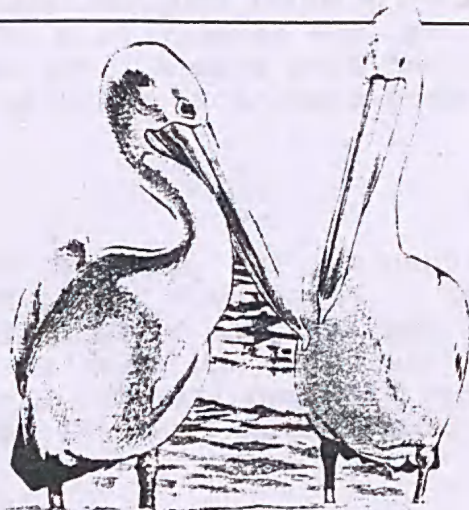
Visited briefly in the early afternoon but no notes were taken. Numerous species of Ducks (mainly Grey Teal, Pacific Black, Hardhead and Eurasian Coots) in huge numbers. No fish catching species however. Some Black Swan were observed but no Brolgas nor Sarus Crane, although these were heard at approximatey 8am from Pandanus Lagoon while carrying out the Survey. (Note no record as species not determined).

As this Lagoon has only been completed in recent weeks it is my opinion that drowning termites from the newly cleared area may be the attracting food source. I noted that the water surface in many areas of the adjacent Pandanus Lagoon was covered with the termite wings which would indicate the termites were ready to swarm (increasing termite population) at the precise time the newly formed Lagoon began to fill.

Other Items of Interest:-

Flowering Species

Haemodorum coccineum - Scarlet flowered Blood Root.



CAIRNS BASED WADER STUDY GROUP

After much starting and stopping a small group of people have agreed to form a loose special interest group which now monitor wader populations in Trinity Inlet and undertake specific studies on topics related to these birds. The Trinity Inlet Management Plan and the Department of Environment agencies have been very helpful in offering their support for the activities of the Wader Study Group.

The first project was an examination of monitoring methods with the intent of developing a reliable, sustainable regular counts of waders which would provide a frequent estimate of the total number of waders in the inlet (the 'comprehensive count').

The plan is to carry out a monthly estimate at approximately the middle of each month. The monthly 'comprehensive count' will include the following activities completed within 4 days.

- (1) Esplanade counts - outgoing tide
- (2) - incoming tide
- (3) Redden Island - incoming tide
- (4) Roost counts from Ellie Point to mouth of the Barron River
- (5) Concurrent Airport birdstrike surveys
- (6) Wimbril count at dusk
- (7) Miscellaneous counts

'Miscellaneous counts' are wide ranging counts to detect changes in the pattern of habitat use (e.g. new roost sites) and to help interpret the results of the 6 other counts.

The results so far...

Initial results produced indicate that there was a major roost at the south bank of the mouth of the Barron River numbering approx. 90% of the estimated comprehensive count total. The 'comprehensive count' total at that time (excluding dusk Wimbril count and additional records from Airport) was 1982 waders, if Wimbrils were included (approx. 800-1000 birds) and additional records from the Airport (e.g. Sharp-tails), the overall total would exceed 3000 waders. The Esplanade records are very dependant on good conditions allowing for an accurate estimate.

In the coming months...

We are trying to organise the monthly counts beginning possibly the third week of February. If you are interested in joining in the counts, and learning to identify waders (with a great boat ride across the Inlet and out to Redden Island) please contact Grahame Finnigan from the Bird Observers Club and Wader Study Group Co-ordinator on (H) 40556139 or (W) 40523434 ****

WATER BOUND WATERS REPORT

This report is a summary of the results of the water bound waters survey conducted in the area of the Trinity River, Texas, during the summer of 1964. The survey was conducted by the Texas Department of Transportation, Division of Highways, and the Texas Department of Water Resources, Division of Water Quality. The survey was conducted in the area of the Trinity River, Texas, during the summer of 1964. The survey was conducted by the Texas Department of Transportation, Division of Highways, and the Texas Department of Water Resources, Division of Water Quality. The survey was conducted in the area of the Trinity River, Texas, during the summer of 1964. The survey was conducted by the Texas Department of Transportation, Division of Highways, and the Texas Department of Water Resources, Division of Water Quality.

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- (1) Collected samples - 1000
- (2) Collected samples - 1000
- (3) Collected samples - 1000
- (4) Collected samples - 1000
- (5) Collected samples - 1000
- (6) Collected samples - 1000
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The results of the

The results of the survey indicate that there was a significant amount of water bound water in the area of the Trinity River, Texas, during the summer of 1964. The survey was conducted by the Texas Department of Transportation, Division of Highways, and the Texas Department of Water Resources, Division of Water Quality. The survey was conducted in the area of the Trinity River, Texas, during the summer of 1964. The survey was conducted by the Texas Department of Transportation, Division of Highways, and the Texas Department of Water Resources, Division of Water Quality.

Water bound water

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